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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/202,024 08/25/99 SCHAEFER-LORINSER

EXAMINER

026646
KENYON & KENYON
ONE BROADWAY
NEW YORK NY 10004

TM02/0924

ART UNIT PAPER NUMBER

DATE MAILED:

09/24/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/202,024

Applicant(s)

SCHAEFER-LORINSER ET AL.

Examiner

Marianne Huseman

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 25 August 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) Z.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the apparatus used to perform the method steps of claims 15 – 23 and the device claimed in claims 24 - 29 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Specification

2. The following is a quotation of 37 CFR 1.71(a)-(c):
 - (a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.
 - (b) The specification must set forth the precise invention for which a patent is solicited, in such manner as to distinguish it from other inventions and from what is old. It must describe completely a specific embodiment of the process, machine, manufacture, composition of matter or improvement invented, and must explain the mode of operation or principle whenever applicable. The best mode contemplated by the inventor of carrying out his invention must be set forth.
 - (c) In the case of an improvement, the specification must particularly point out the part or parts of the process, machine, manufacture, or composition of matter to which the improvement relates, and the description should be confined to the specific improvement and to such parts as necessarily cooperate with it or as may be necessary to a complete understanding or description of it.
3. The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

The following order or arrangement is preferred in framing the specification and, except for the reference to "Microfiche Appendix" and the drawings, each of the lettered items should appear in upper case, without underlining or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) Title of the Invention.
- (b) Cross-References to Related Applications.
- (c) Statement Regarding Federally Sponsored Research or Development.
- (d) Reference to a "Microfiche Appendix" (see 37 CFR 1.96).
- (e) Background of the Invention.
 1. Field of the Invention.
 2. Description of the Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) Brief Summary of the Invention.
- (g) Brief Description of the Several Views of the Drawing(s).
- (h) Detailed Description of the Invention.
- (i) Claim or Claims (commencing on a separate sheet).
- (j) Abstract of the Disclosure (commencing on a separate sheet).
- (k) Drawings.
- (l) Sequence Listing (see 37 CFR 1.821-1.825).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 15 – 29 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. There is no specific illustration or description in the specification as to how the methods claimed are carried out. There is also no disclosure for any of the means claimed. The following are a few examples: a third number of clock pulses are claimed (see claim 22), but nowhere in the specification is this disclosed; it is not clear from the specification as to where exactly "downstream counters" are located (most claims); there is no description of any counters being subdivided or reduced as is claimed in claim 29 and, there is no disclosure for "non-linear feedback shift registers" as claimed in claim 24.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 15 – 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 15, lines 7 – 13, it is not clear as to where these steps are performed, i.e., in the card or in the module?

In claim 15, where is the input data coming from, i.e., what is producing/generating the input data.

In claim 18, it is not clear as to what is meant by "different contents of the... counter are used".

In claim 21, it is not clear as to what is outputting bits.

In claim 24, line 10, it is not clear as to what is meant by "one additional non-linear feedback for ..."; perhaps - - shift register - - needs to be inserted. Also, it is not

clear as to how the non-linear feedback shift register relates to the other means claimed, i.e., how is it connected to the other means claimed?

In claim 25, it is not clear as to what is meant by "the additional feedback is tapped off". This also applies to claims 26 and 27; "read off".

In claim 28, it is not clear as to what is meant by "additional feedback is generated as an XOR sum".

In claim 29, it is not clear as to what is meant by subdividing or reducing counters.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pieterse et al teach a method of debiting an electronic payment means wherein the use of linear feedback shift registers, a security module and authentication codes are taught. Puhl et al teach an encryption apparatus having a feedback register with selectable taps; see figure 2, column 4, lines 28 – 68 and column 5, lines 1 – 54, particularly column 5, lines 4 – 8, wherein non-linearity of the pseudo random sequence is mentioned. Ooi teaches a pn generator, Figure 12b, using non-linear logic, wherein a linear feedback shift register and selecting among various outputs of the register is taught. Furuta et al teach a pn generator, Figure 50, wherein a timed switch is used to select various outputs of a linear feedback shift register; see column 23, lines 16 – 23. Finkelstein teaches an encryption system wherein non-linearity is introduced into a basic linear feedback shift register structure; see column 5, lines 19 – 27. Raimann is cited because a payment system that utilizes a chip card, security module and a pseudo-random number generator, for encryption, is taught.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne Huseman whose telephone number is 703-605-4277. The examiner can normally be reached on Monday - Friday, 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 703-305-9768. The fax phone numbers for the organization where this application or proceeding is assigned are 703-

305-9051 for regular communications and 703-305-9051 for After Final communications.

10. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9700.

Marianne Huseman

mh
September 15, 2001



JAMES P. TRAMMELL
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